

A Taxonomic Revision of the Genus *Basitrodes* (Coleoptera, Staphylinidae, Pselaphinae)

Part 2. *Basitrodes vestitus* Group

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Abstract As the second part of the revision, *Basitrodes vestitus* (SHARP) is re-described and a new species, *B. godzilla* is described from Hokuriku District. A key to the species of this genus is provided and a list of species in the present system is added.

Key words: Taxonomy, Staphylinidae, Pselaphinae, Batrisini, *Basitrodes*, new species.

Basitrodes godzilla sp. nov.

[Japanese name: Gojira-tsuno-arizukamushi]
(Figs. 1 B, 2 E–F, 3 E–F, 5 A, B, D)

Etymology. The specific name of this species is derived from “Godzilla” for its large body and rough surface of the head. The “Godzilla” is a monstrous beast illustrated in a series of Japanese cinemas, which is sized a hundred meters in height, sixty thousands tons in weight, and looks like a rough faced dinosaur. The English spell of “Godzilla” is given in the Hollywood picture “Godzilla” remade from the Japanese one in 1999.

Type material. Holotype ♂ (preserved in National Science Museum, Tokyo), Iwama-dô, Mt. Hakusan, Okuchi-mura, Ishikawa Pref., 31–VII–1994, K. NAKATA leg. Paratypes: 2 ♀, same data as the holotype.

Male (Fig. 1 B). Length 2.79 mm. Width 0.96 mm.

Body large and thick, elytra and abdomen broadened, reddish brown.

Head (Fig. 2 E–F) slightly longer than wide, weakly broadened anteriad; clypeus projected at median part, with 3 to 4 pairs of long and curved setae around the median projection; frontal horn short and well-projected, nodulate and triangular in apical 1/3, then broadened basally, with a pair of fringes along lateral margins in basal 2/3, and with a pair of strong transverse carinae reaching just before eyes, a short and strong vertical carina extending to the median projection, and a pair of small pencils just below antennal bases; frons strongly convex and coarsely punctate on lateral sides, concave and sparsely punctate in median part; vertex gently convex, with a pair of

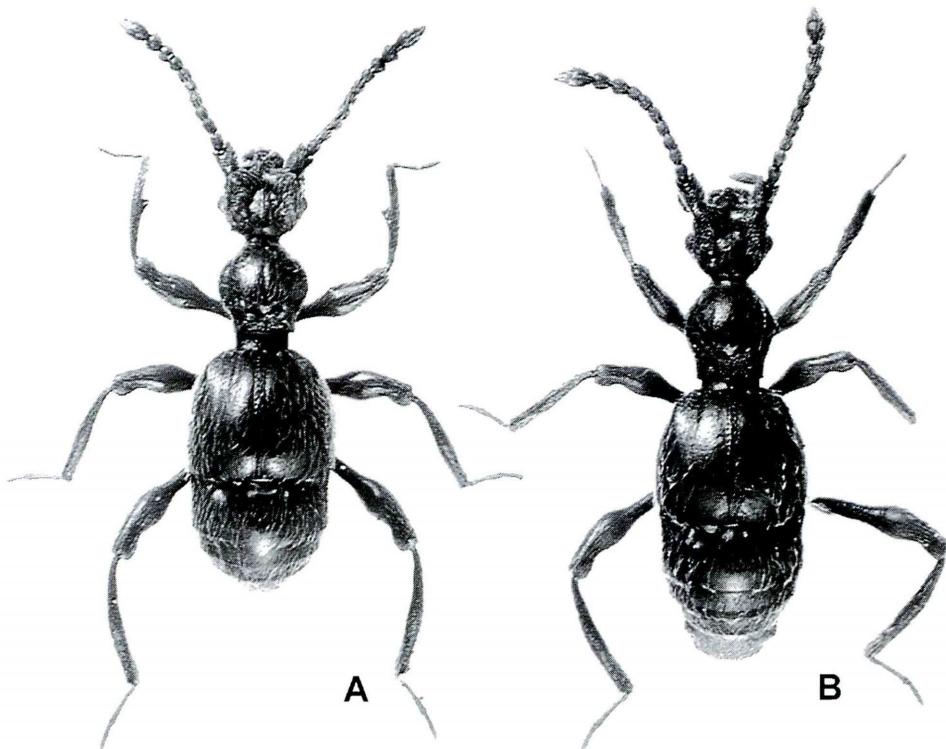


Fig. 1. A, *Basitrodes vestitus* (SHARP), male; B, *B. godzilla* sp. nov., male.

large and circular dorsal tentorial pits, sparsely covered with minute punctures; postgenae very large, almost flat, each with a short longitudinal carina, densely with long and erect hairs. Eyes small and ovoid, each composed of about 30 facets. Antennae 1.31 mm in length, slender and moniliform; 1st segment the largest, slightly broadened distad, with a large setiferous patch on inner side, and with a large inner and a small outer projections at apex; relative length (width) of each segment from base to apex:— 2.0 (1.1): 1.0 (0.8): 0.9 (0.8): 0.7 (0.7): 0.7 (0.7): 0.7 (0.7): 0.6 (0.7): 1.0 (1.0): 1.0 (1.0): 2.0 (1.0). Maxillary palpi large and stout; 1st segment very short and tubular, 2nd elongate, gradually thickened distad, 3rd short, broadened distally; 4th the largest, 4 times as long as wide, fusiform.

Pronotum about as long as head, as long as wide, subglobose, with a pair of short and indistinct lateral longitudinal sulci; V-shaped median depression, short and shallow median longitudinal sulcus, and a pair of small antebasal foveae. Metasternum very large and transverse, with a pair of humps between mid and hind coxae, and a shallow median longitudinal sulcus. Elytra wider than long, nearly trapezoidal, gently convex; each elytron with three basal foveae and a lateral longitudinal sulcus running

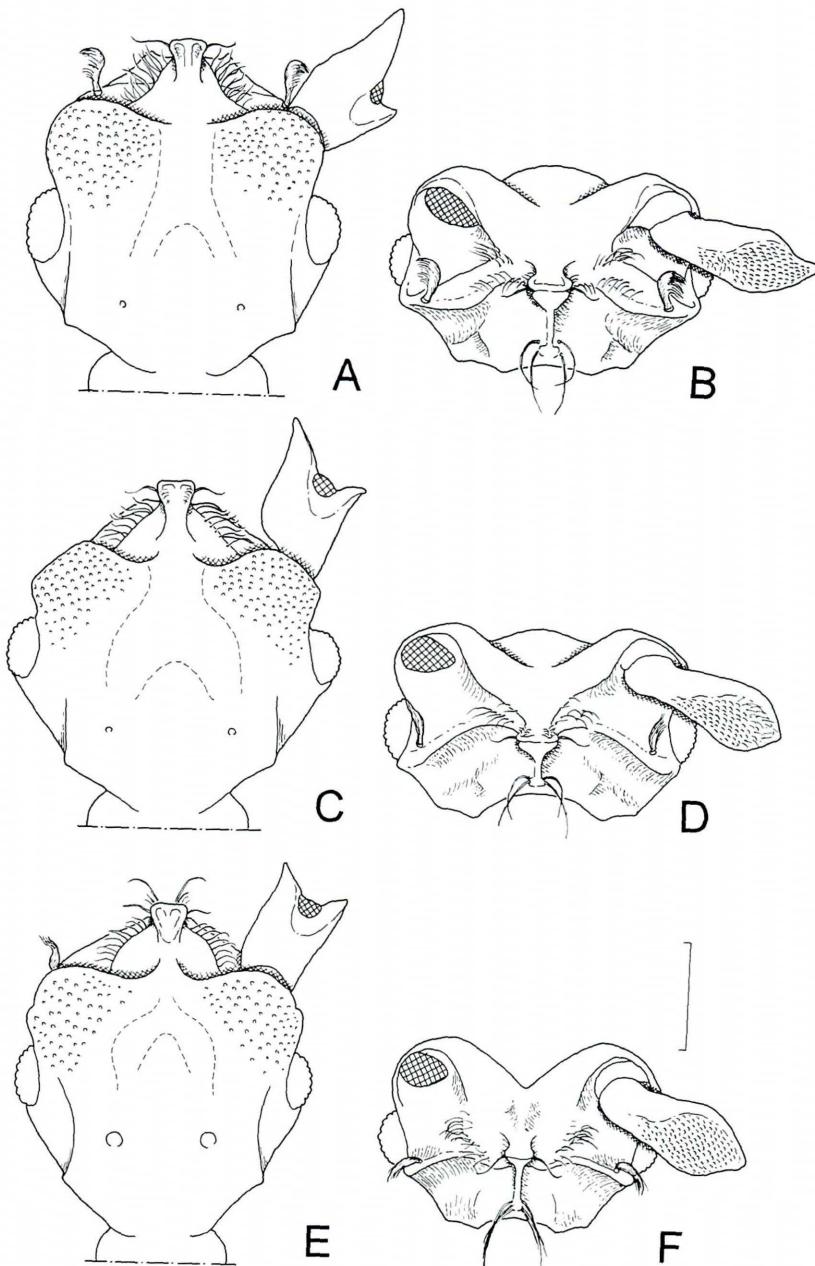


Fig. 2. Male heads of *Basitrodes* spp.; A, C, E, head in dorsal view; B, D, F, ditto in frontal view. — A, *B. godzilla* sp. nov. — B, *B. vestitus* (SHARP) from Makomanai, Hokkaido; C, D, ditto from Okukinu, Tochigi Pref.; E, F, *B. vestitus* (SHARP) from Okukinu, Tochigi Pref. Scale: 0.2 mm.

from outer basal fovea to anterior 1/3. Legs long and stout, fore tibiae (Fig. 3 E) each elongate, weakly thickened near the middle, with a large spine at basal 4/9 on inner side; mid trochanter each very small, longer than wide, with a small denticle at apex; mid tibiae each slender, with a very small hook-like spine at apex.

Abdomen slightly narrower than elytra, wider than long; 4th tergite largest and transverse, parallel-sided, 5th to 7th each short, 6th slightly shorter than 5th, 7th longer than 5th, 8th tergite semicircular in ventral view; 8th sternite semicircular, flattened in median part. Male genitalia (Fig. 5 A–B) strongly sclerotized; parameres lamellar, fused to each other, forming a lobe; median lobe of male genitalia consisting of quadrangular basal bulb, nearly square basal foramen, and two apical processes; basal foramen rimmed with elongate lobes on lateral sides, with a spine-like basal projection at basimedian part; left apical process long and elongate, broadened distally, with two small projections at apex; right apical process as long as left, narrower than left, gradually narrowed distad, acute at apex; endophallus membranous, including four slender and needle-like sclerites.

Female. Length 2.79 mm. Width 0.96 mm. Antennae 1.29 mm in length. Similar to male, but differs in the following characters: head slightly wider than long; clypeus weakly angulate at median part of anterior margin, without frontal horn, pencil, fringe and carina; fore tibia (Fig. 3 F) denticulate as in male, but the denticle is smaller than in male, located at the middle; mid trochanters and mid tibiae without denticle and spine; 9th sternite (Fig. 5 D) transverse and shortened medially, sinuate on lateral margin; genital plate about as long as wide, concave on posterior margin in ventral view.

Distribution. Japan (Honshu: Hokuriku District).

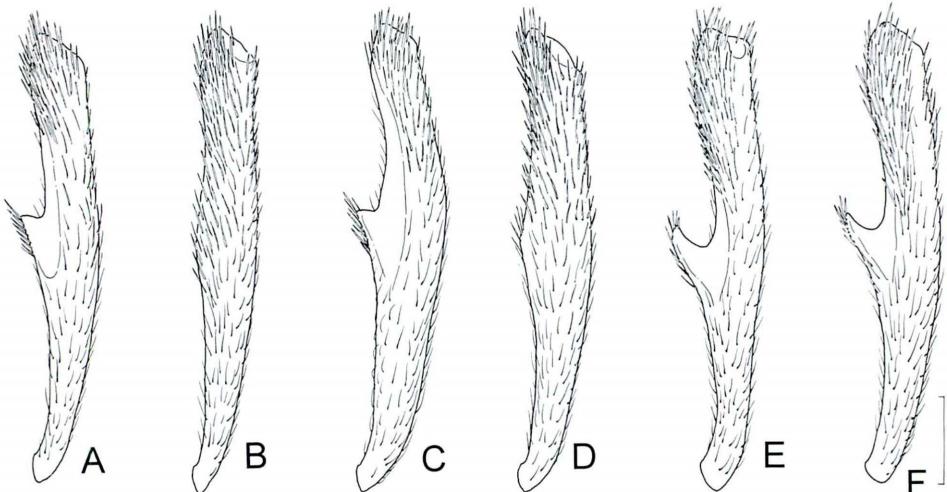


Fig. 3. Fore tibiae of *Basitrodes* spp.; A, C, E, male; B, D, F, female. — A, B, *B. vestitus* (SHARP) from Hokkaido; C, D, ditto from Fukushima Pref., Honshu; E, F, *B. godzilla* sp. nov. Scale: 0.2 mm.

Remarks. This species is a member of the *vestitus* group, which is easily separated from the *oscillator* group by having the large and dark colored body and the fore tibia with large denticle near the middle on inner side in the male. It is very similar to *B. vestitus*, but the body is slenderer than in *vestitus*, the postgenae is longer and more strongly narrowed than in *vestitus* and the fore tibia with a large denticle near the middle even in the female.

Host ants. *Aphaenogaster japonica* FOREL: Iwama-dō, Ishikawa Pref. (present study).

Basitrodes vestitus (SHARP, 1883)

[Japanese name: Chūzenji-tsuno-arizukamushi]

(Figs. 1 A, 2 A–D, 3 A–D, 4, 5 C)

Batrissus vestitus SHARP, 1883, Trans ent. Soc. London, **1883**: 307.

Batrissodes vestitus: RAFFRAY, 1904, Annls. Soc. ent. Fr., **73**: 89; 1908, Gen. Ins., (64): 161; 1911, Coleopt. Cat., (27): 65. —— PARK, 1948, Bull. Chicago Acad. Sci., **8**: 154; 1948, *ibid.*, **8**: 210.

Batrisodes vestitus: JEANNEL, 1958, Mém. Mus. Hist. nat., Paris, (A), **18**: 28. —— WATANABE, 1985 Coleopt. Japan Color, Osaka, **2**: 322. —— NOMURA, 1989, Check List Jpn. Ins., Fukuoka, [1]: 288.

Type material examined. *Batrissus vestitus*, holotype (by monotypy), male in BMNH, “*Batrissus vestitus*. Type D. S. Chiuzenji, Japan 24. 8. 1881. Lewis. / Type H. T. (round and red-margined) / Sharp Coll. 1905–313”.

Additional specimens. (Hokkaido) 1♂, Moshiri, Horokanai-chō, 12–IX–2000, M. MARUYAMA leg.; 1♀, Tomambetsu, Nopporo-shinrin-kōen, Ebetsu-shi, 6–VI–1999, M. MARUYAMA leg.; 1♂, same locality as above, 4–V–2000, H. SUGAYA leg.; 1♀, Ōsawaguchi, Nopporo-shinrin-kōen, Ebetsu-shi, 5–X–2000, H. SUGAYA leg.; 1♂, Makomanai, Sapporo-shi, 13~14–VI–1992, S. HORI leg.; 1♀, same locality as above, 4~11–VI–1992, S. HORI leg.; 1♂, Kitanosawa, Sapporo-shi, 5~21–VI–1992, S. HORI leg.; 1♂, 1♀, Kannon-zawa, Sapporo-shi, 7–V–2000, H. SUGAYA leg.; 1♂, Tohmaru-tōge, 500 m alt., by Tullgren funnel, Furubira-chō, Shakotan, 20–VII–2000, S. NOMURA leg.; 2♂, Nakashima Is., Tōya Lake, Abuta-chō, 17~29–VII–1993, S. HORI leg.; 1♂, Teshiogawa River, Teshio-chō, 22–VII–1992, S. HORI leg.; 1♀, Tokachi-Mitsumata, 750 m alt., pine tree stands, by Tullgren funnel, Kami-Shihoro-chō, 4–VII–2001, S. NOMURA leg.; 1♂, Kimontō pond, Taiki-chō, Tokachi, 4–IX–1993, K. SHIBATA leg.; 1♀, Chimikeppu Lake, Tsubetsu-chō, Kitami, 6~17–VII–1994, S. HORI leg.; 1♀, Nakayama Fūketsu, Oketo-chō, Kitami, 23–VI~8–VII–1994, S. HORI leg.; 1♀, Omushari-tō pond, Okoppe-chō, Kitami, 17–VII~2–VIII–1994, S. HORI leg.; 2♀, Mt. Karibasan, Shiribeshi, 12–VI–1986, S. NOMURA leg.; 1♀, same data as above, but 14–VI–1986; 1♀, Higashi-Ohnuma, Nanae-chō, Oshima, 16–VI–1986, S. NOMURA leg.; 1♀, Motoyama, Esashi-chō, 11–VI–1995, S. HORI leg. (Honshu) 1♀, Mt. Iegata-yama, Azuma Mts., Yamagata Pref., 12–VIII–1999, K. KUSAKARI leg.; 1♂, Yokomuki, Mt. Adatarayama, Fukushima Pref., 9–VII–1985, S. NOMURA leg.; 1♂, Setogarō Valley, Iwaki-shi, Fukushima Pref., 19–VII–1995, S. NOMURA leg.; 1♂, Kōzodaira, Hinoe-

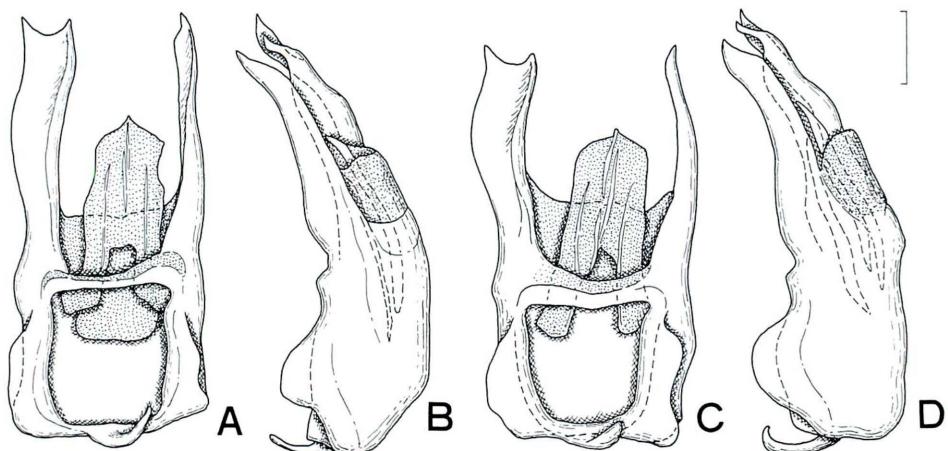


Fig. 4. Male genitalia of *Basitrodes vestitus* (SHARP); A, C, ventral view; B, D, lateral view. — A, B, male from Tôya Lake, Hokkaido; C, D, ditto from Okukinu, Tochigi Pref. Scale: 0.1 mm.

mata-mura, Fukushima Pref., 26–VII–1996, S. NAOMI leg.; 1♂, Okukinu, Kuriyama-mura, Tochigi Pref., 30–V–1991, S. NAOMI leg.; 1♂, Kakuma Pass, Gunma Pref., 6–VIII–1939, K. SAKAGUTI leg.; 1♂, Konakayama, Kajikawa-mura, Niigata Pref., 17–IX–1984, K. BABA leg.; 1♀, Mt. Gagyûsan, Murakami-shi, Niigata Pref., 17–X–1978, H. KOIKE leg.; 1♀, same locality as above, 17–IX–1979, H. KOIKE leg.; 1♂, summit of Mt. Iizunayama, 1,917 m alt., Nagano Pref., 29–VI–1943, K. SAKAGUTI leg.

Male (Fig. 1A). Length 2.68–2.91 mm. Width 0.91–1.03 mm. Similar to *B. godzilla* in general aspects, but different in the following characters: head (Fig. 2 A–D) wider than long; frontal horn less projected than in *godzilla*, rounded on anterior margin; vertex slightly convex, with a pair of smaller dorsal tentorial pits than in *godzilla*; postgenae very weakly rounded, shorter and wider than in *godzilla*; eyes larger than in *godzilla*, each composed of 30–35 facets; antennae similar in structure to that of *godzilla*, 1.28–1.38 mm in length, relative length (width) of each segment from base to apex:— 2.0 (1.1): 1.0 (0.8): 0.9 (0.8): 0.7 (0.7): 0.7 (0.7): 0.7 (0.7): 0.6 (0.7): 1.0 (1.0): 1.0 (1.0): 2.0 (1.0); fore tibiae (Fig. 3 A, C) elongate, weakly incurved, each with a large denticle at the middle on inner side; median lobe of male genitalia (Fig. 4) very similar in structure to that of *godzilla*, but slightly broader, more angulate basally and its basal foramen wider than in *godzilla*.

Female. Length 2.80–2.95 mm. Width 0.98–0.99 mm. Antennae 1.25–1.31 mm in length. Similar to male, but separated by the following features: clypeus more expanded than in male, angulate on anterior margin, without frontal horn, frontal pencil, carina and fringe in fronto-clypeal region; fore tibiae (Fig. 3 B, D) thickened at the middle, hardly denticulate on inner side; mid tibiae without mucro; 8th abdominal sternite gently convex; 9th sternite (Fig. 5 C) transverse, shortened medially, with a pair of

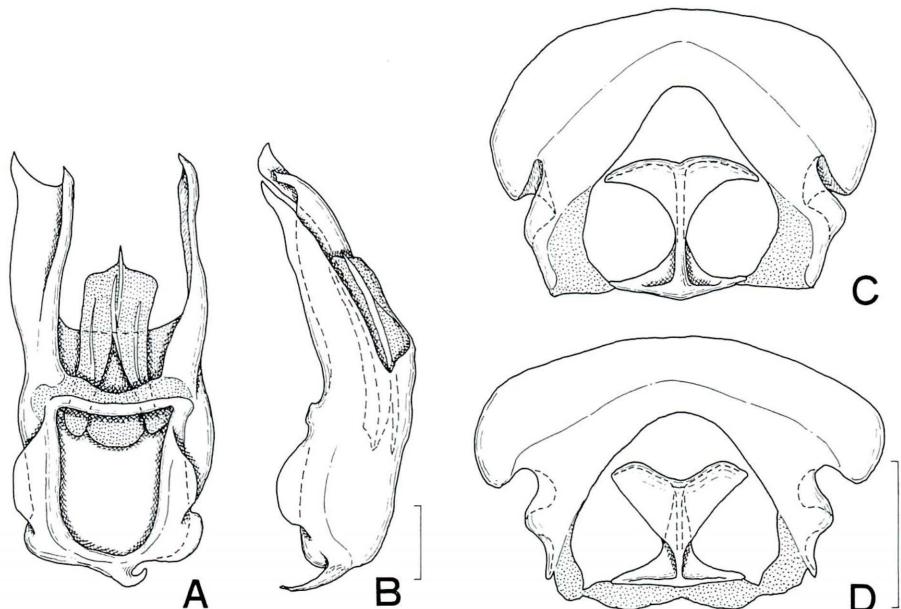


Fig. 5. Male and female genitalia of *Basitrodes* spp.; A, male genitalia in ventral view; B, ditto in lateral view; C, D, female 9th sternite and genital plate. — A, B, D, *B. godzilla* sp. nov.; C, *B. vestitus* (SHARP). Scale: 0.1 mm.

ventral struts at base; genital plate as long as wide in ventral view, less concave on anterior margin than in *godzilla*.

Distribution. Japan (Hokkaido, Honshu).

Remarks. This species is distinguished from *B. godzilla* by the shorter postgenae and the fore tibia with a smaller denticle than in *godzilla* at the middle in the male. It is more easily distinguished in the female by lacking large denticle as the male on the fore tibia.

Host ants. *Paratrechina flavipes* SMITH: Inokashira, Tokyo (NAKANO & YOSHIDA). *Myrmica kotokui* FOREL: Moshiri, Hokkaido, Tomambetsu, Hokkaido (present study). *M. jessensis* FOREL: Ōsawaguchi, Hokkaido (present study). *M. sp.* (Oh-kushike-ari in Japanese name): Mt. Karibasan, Hokkaido Pref., Mt. Iizunayama, Nagano Pref. (present study). *Aphaenogaster famelica* (FR. SMITH): Higashi-Ohnuma, Hokkaido Pref. (present study). *A. japonica* FOREL: Tomambetsu, Hokkaido, Kannonzawa, Hokkaido (present study).

A Key to the Species of the Genus *Basitrodes*

1. Body large (2.68–2.95 mm in length), dark brown to reddish brown; fore tibiae each with a large denticle near the middle on inner side in male 2.

- Body small to large (2.10–2.84 mm in length), reddish to yellowish brown; fore tibiae each slender, slightly thickened near the middle 3.
- 2. Body broader; postgenae shorter and less narrowed, with a pair of indistinct longitudinal carinae behind eyes; fore tibiae without denticle in female *B. vestitus* (SHARP).
- Body slenderer, postgenae longer and more narrowed, with a pair of longitudinal carinae behind eyes; fore tibiae with a large denticle in female as in male *B. godzilla* sp. nov.
- 3. Body large (2.68–2.84 mm in length); head with a small anteromedian cone and a pair of large and less distant pencils on fronto-clypeal region in male *B. hakusanus* NOMURA.
- Body small (2.10–2.43 mm in length); head with a small anteromedian cone and a pair of small and more distant lateral pencils on fronto-clypeal region in male. 4.
- 4. Head with a pair of transverse ridges connecting anteromedian cone and lateral pencils on fronto-clypeal region in male; median lobe of male genitalia angulate at base *B. oscillator* (SHARP).
- Head without transverse ridge connecting anteromedian cone and lateral pencils in male; median lobe of male genitalia less angulate at base *B. kasaharai* NOMURA.

A List of the Species of the Genus *Basitrodes* and its Allies

Genus *Basitrodes* JEANNEL, 1958

Bs. oscillator (SHARP, 1883); Japan (Hokkaido, Honshu)
Bs. kasaharai NOMURA, 2002; Japan (Honshu: Kanto District)
Bs. hakusanus NOMURA, 2002; Japan (Honshu: Hokuriku District)
Bs. vestitus (SHARP, 1883); Japan (Hokkaido, Honshu)
Bs. godzilla NOMURA, 2003; Japan (Honshu: Hokuriku District)

Genus *Basitrodes?* *incertae sedis*

Bs.? *vulgaris* (RAFFRAY, 1909); Japan (Honshu)
Bs.? *punctipennis* (SHARP, 1883); Japan (Honshu)
Bs.? *lepto thorax* NOMURA et LEE, 1992; Korea (Chejudo Is.)
Bs.? *myrmecophilus* NOMURA et LEE, 1993; Korea
Bs.? *cornutus* KURBATOV, 1984; Kuril Isls. (Kunashir Is.)

Genus *Batrissodellus* JEANNEL, 1958

Bt. laticollis (JEANNEL, 1958); Japan (Kyushu)
Bt. palpalis (SHARP, 1883); Japan (Honshu)
Bt. longulus (JEANNEL, 1958); Japan (Honshu)
Bt. cristatus (JEANNEL, 1958); Japan (Honshu)
Bt. acuminatus (JEANNEL, 1958); Japan (Kyushu)

要 約

野村周平：ツノアリヅカムシ属の分類学的再検討（コウチュウ目ハネカクシ科アリヅカムシ亜科）。第2部：チュウゼンジツノアリヅカムシ種群。——本研究の第2部として、*B. vestitus*種群を検討した。日光中禅寺湖畔から記載され、北海道、本州北部に分布するチュウゼンジツノアリヅカムシの再記載と記録の追加を行った。また、石川県白山から、*B. godzilla* ゴジラツノアリヅカムシを記載した。これらについて、宿主アリの記録を付記した。さらに属全体の検索表と、従来本属とされていた種ならびに新たに本属として記載された種、合計15種の種リストを作成した。

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Elytra, Tokyo, **31** (1): 183–186, June 30, 2003

Additional Records of *Awas shunichii* (Coleoptera, Staphylinidae, Pselaphinae), with a Note on its Habitat in Taiwan

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The giant pselaphid genus *Awas* LÖBL has hitherto been represented by only two species,